

# Aluminum Extruded Product Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU



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-- Not applicable for this report.

# Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)					
331316, Aluminum extruded product manufacturing .....	2002..	134	193	27 465	986 428	21 585	44 742	672 756	2 418 204	3 383 106	5 712 968	'152 080
	2001..	N	N	29 494	1 008 841	23 440	49 206	667 499	2 251 262	3 563 553	5 822 312	178 469
	2000..	N	N	30 752	1 042 595	24 675	52 054	707 941	2 564 455	3 524 130	6 086 513	238 254
	1999..	N	N	30 727	1 007 963	24 508	51 103	682 713	2 544 127	3 368 317	5 914 592	194 911
	1998..	N	N	31 690	1 001 575	25 803	52 270	691 486	2 540 236	3 570 602	6 170 183	221 343
	1997..	105	160	30 357	944 829	24 556	52 804	661 814	2 476 351	3 742 324	6 177 701	208 984

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
<b>331316, Aluminum extruded product manufacturing</b>												
United States .....	—	193	146	27 465	986 428	21 585	44 742	672 756	2 418 204	3 383 106	5 712 968	152 080
Arizona .....	—	5	4	921	37 184	813	1 757	31 093	76 365	68 450	145 305	5 947
California .....	—	24	18	2 506	92 271	2 021	4 061	64 439	174 021	326 918	505 401	11 318
Florida .....	—	8	4	692	26 411	522	864	17 504	83 915	114 134	195 980	4 286
Georgia .....	—	8	8	1 992	74 650	1 502	3 246	49 027	139 207	249 443	388 459	8 970
Illinois .....	—	6	4	898	30 323	726	1 473	20 930	66 502	60 899	126 958	1 632
Indiana .....	—	14	12	2 509	105 014	1 850	3 848	68 733	215 002	279 661	494 880	19 471
Kansas .....	—	3	2	180	5 460	123	249	3 069	13 276	19 644	33 050	234
Michigan .....	—	16	13	1 650	58 098	1 224	2 494	38 696	205 810	163 224	289 138	18 498
New York .....	—	5	4	1 344	57 234	1 090	2 287	41 330	287 802	139 452	429 125	5 469
North Carolina .....	4	5	3	341	12 657	266	585	8 624	20 003	49 210	70 632	980
Ohio .....	2	21	14	1 977	57 092	1 651	3 403	40 619	147 359	219 377	367 120	8 348
Pennsylvania .....	—	6	5	1 848	70 436	1 423	2 917	46 930	181 126	261 344	439 205	8 864
Texas .....	1	14	7	1 663	56 905	1 325	2 855	36 063	145 548	223 314	368 239	6 855
Virginia .....	—	5	3	810	27 858	682	1 456	21 695	56 638	77 055	133 639	14 706

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
<b>331316, Aluminum extruded product manufacturing</b>	
Companies <sup>1</sup> .....	number.. 134
All establishments <sup>2</sup> .....	number.. 193
Establishments with 1 to 19 employees .....	number.. 47
Establishments with 20 to 99 employees .....	number.. 57
Establishments with 100 employees or more .....	number.. 89
All employees <sup>3</sup> .....	number.. 27 465
Total compensation .....	\$1,000.. 1 279 551
Annual payroll .....	\$1,000.. 986 428
Total fringe benefits .....	\$1,000.. 293 123
Production workers, average for year .....	number.. 21 585
Production workers on March 12 .....	number.. 21 452
Production workers on May 12 .....	number.. 21 862
Production workers on August 12 .....	number.. 21 999
Production workers on November 12 .....	number.. 20 986
Production worker hours .....	\$1,000.. 44 742
Production worker wages .....	\$1,000.. 672 756
Total cost of materials .....	\$1,000.. 3 383 106
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 3 063 536
Resales .....	\$1,000.. 36 970
Purchased fuels .....	\$1,000.. 101 819
Purchased electricity .....	\$1,000.. 98 569
Contract work .....	\$1,000.. 82 212
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 1 861 124
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. S
Total value of shipments .....	\$1,000.. 5 712 968
Primary products value of shipments .....	\$1,000.. 5 163 692
Secondary products value of shipments .....	\$1,000.. 397 886
Total miscellaneous receipts .....	\$1,000.. 151 390
Value of resales .....	\$1,000.. 41 287
Contract receipts .....	\$1,000.. 8 915
Other miscellaneous receipts .....	\$1,000.. 101 188
Primary products specialization ratio .....	percent.. 93
Value of primary products shipments made in all industries .....	\$1,000.. 5 367 804
Value of primary products shipments made in this industry .....	\$1,000.. 5 163 692
Value of primary products shipments made in other industries .....	\$1,000.. 204 112
Coverage ratio .....	percent.. 96
Value added .....	\$1,000.. 2 418 204
Total inventories, beginning of year .....	\$1,000.. 501 592
Finished goods inventories .....	\$1,000.. 121 470
Work-in-process inventories .....	\$1,000.. 157 602
Materials and supplies inventories .....	\$1,000.. 222 520
Total inventories, end of year .....	\$1,000.. 829 911
Finished goods inventories .....	\$1,000.. 123 808
Work-in-process inventories .....	\$1,000.. 243 606
Materials and supplies inventories .....	\$1,000.. 462 497
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '2 567 114
Total capital expenditures (new and used) .....	\$1,000.. '152 080
Buildings and other structures (new and used) .....	\$1,000.. '17 737
Machinery and equipment (new and used) .....	\$1,000.. '134 343
Automobiles, trucks, etc., for highway use .....	\$1,000.. '2 729
Computers and peripheral data processing equipment .....	\$1,000.. '4 569
All other expenditures for machinery and equipment .....	\$1,000.. '127 045
Total retirements .....	\$1,000.. '54 552
Gross value of depreciable assets at end of year .....	\$1,000.. '2 664 642
Depreciation charges during year .....	\$1,000.. '162 461
Total rental payments .....	\$1,000.. 38 831
Buildings and other structures .....	\$1,000.. 21 064
Machinery and equipment .....	\$1,000.. 17 767
Total other expenses <sup>4</sup> .....	\$1,000.. 310 369
Response coverage ratio <sup>5</sup> .....	percent.. 73
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 55 020
Communications services <sup>4</sup> .....	\$1,000.. 6 489
Legal services <sup>4</sup> .....	\$1,000.. 2 995
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 2 125
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 3 450
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 5 263
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 8 561
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 14 784
Taxes and license fees <sup>4</sup> .....	\$1,000.. 17 884
All other expenses <sup>4</sup> .....	\$1,000.. 193 797

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on 2002 Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
331316, Aluminum extruded product manufacturing											
All establishments .....	—	193	27 465	986 428	21 585	44 742	672 756	2 418 204	3 383 106	5 712 968	'152 080
Establishments with—											
1 to 4 employees .....	9	16	32	1 027	26	45	664	1 615	3 296	5 259	'92
5 to 9 employees .....	6	19	142	5 765	106	220	3 691	8 438	16 781	26 305	'345
10 to 19 employees .....	8	12	165	5 629	127	251	3 554	95 121	18 739	31 970	'1 246
20 to 49 employees .....	1	23	f	D	D	D	D	D	D	D	D
50 to 99 employees .....	1	34	2 513	80 505	1 957	4 022	51 549	213 326	270 533	485 421	'21 332
100 to 249 employees .....	—	51	8 555	310 168	6 584	13 375	210 506	660 872	1 359 791	2 013 778	'47 698
250 to 499 employees .....	—	32	10 583	353 201	8 677	18 035	255 187	777 377	1 043 002	1 817 364	'54 027
500 to 999 employees .....	—	4	2 459	97 950	1 935	4 205	63 684	362 548	238 897	603 502	10 444
1,000 to 2,499 employees .....	—	2	g	D	D	D	D	D	D	D	D
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	34	306	10 428	244	480	6 975	21 458	35 089	56 547	'990

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
331316	Aluminum extruded product manufacturing .....	193	27 465	986 428	21 585	44 742	672 756	2 418 204	3 383 106	5 712 968	'152 080
3313161	Extruded aluminum rod, bar, and other extruded shapes .....	128	24 588	886 621	19 169	40 151	599 198	2 138 395	3 079 215	5 132 409	'115 726
3313163	Extruded and drawn aluminum tube .	23	2 476	85 498	2 095	3 955	64 142	256 837	268 118	521 172	'34 264

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
331316	Aluminum extruded product manufacturing .....	2002.. N 1997.. N	X X	X X	5 367 804 5 976 360
3313161	Extruded aluminum rod, bar, and other extruded shapes .....	2002.. N 1997.. N	X X	X X	4 671 601 5 140 725
33131611	Extruded aluminum rod and bar, alloys other than 2000 and 7000 series .....	2002.. N 1997.. N	X X	X X	2 215 987 812 931
3313161101	Extruded aluminum rod and bar, alloys other than 2000 and 7000 series .....	1,000 s tons. 2002.. 45 1997.. 20	D 368.6	<sup>q</sup> 1 000.5 355.7	2 215 987 812 931
33131612	Extruded aluminum rod and bar, alloys in 2000 and 7000 series .....	2002.. N 1997.. N	X X	X X	352 997 378 792
3313161206	Extruded aluminum rod and bar, alloys in 2000 and 7000 series .....	1,000 s tons. 2002.. 9 1997.. 10	D 147.8	<sup>q</sup> 160.2 145.6	352 997 378 792
33131613	Other extruded aluminum shapes (except tube), alloys other than 2000 and 7000 series .....	2002.. N 1997.. N	X X	X X	1 318 387 3 402 931
3313161311	Other extruded aluminum shapes (except tube), alloys other than 2000 and 7000 series .....	1,000 s tons. 2002.. 38 1997.. 80	D <sup>q</sup> 1 562.5	S 1 475.4	1 318 387 3 402 931
33131614	Other extruded aluminum shapes (except tube), alloys in 2000 and 7000 series .....	2002.. N 1997.. N	X X	X X	455 818 546 071
3313161416	Other extruded aluminum shapes (except tube), alloys in 2000 and 7000 series .....	1,000 s tons. 2002.. 20 1997.. 24	85.1 <sup>q</sup> 101.1	S 106.3	455 818 546 071
3313161Y	Extruded aluminum rod, bar, and other extruded shapes, nsk .....	2002.. N 1997.. N	X X	X X	328 412 —
3313161YVV	Extruded aluminum rod, bar, and other extruded shapes, nsk .....	2002.. N 1997.. N	X X	X X	328 412 —
3313163	Extruded and drawn aluminum tube .....	2002.. N 1997.. N	X X	X X	634 214 835 635
33131631	Extruded and drawn aluminum tube .....	2002.. N 1997.. N	X X	X X	569 745 835 635
3313163101	Extruded and drawn aluminum tube, alloys other than 2000 and 7000 series .....	1,000 s tons. 2002.. 20 1997.. 25	S 172.0	<sup>q</sup> 128.3 <sup>q</sup> 157.7	420 921 508 423
3313163106	Extruded and drawn aluminum tube, alloys in 2000 and 7000 series .....	1,000 s tons. 2002.. 10 1997.. 17	29.1 74.9	S <sup>q</sup> 74.2	148 824 327 212
3313163Y	Extruded and drawn aluminum tube, nsk .....	2002.. N 1997.. N	X X	X X	64 469 —
3313163YVV	Extruded and drawn aluminum tube, nsk .....	2002.. N 1997.. N	X X	X X	64 469 —
331316W	Aluminum extruded product manufacturing, nsk, total .....	2002.. N 1997.. N	X X	X X	61 989 —
331316WY	Aluminum extruded product manufacturing, nsk, total .....	2002.. N 1997.. N	X X	X X	61 989 —
331316WYWW	Aluminum extruded product manufacturing, nsk, for nonadministrative-record establishments .....	2002.. N 1997.. N	X X	X X	22 035 —
331316WYWY	Aluminum extruded product manufacturing, nsk, for administrative-record establishments .....	2002.. N 1997.. N	X X	X X	39 954 —

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



**Table 6b. Product Class Shipments for Selected States: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3313161	Extruded aluminum rod, bar, and other extruded shapes	
	United States . . . . .	2002 . . 4 671 601
		1997 . . 5 140 725
	Arizona . . . . .	2002 . . 81 889
		1997 . . N
	California . . . . .	2002 . . 388 451
		1997 . . 381 612
	Florida . . . . .	2002 . . 127 824
		1997 . . 189 861
	Georgia . . . . .	2002 . . 402 168
		1997 . . 311 968
	Illinois . . . . .	2002 . . 60 473
		1997 . . 161 722
	Indiana . . . . .	2002 . . 381 134
		1997 . . 513 349
	Michigan . . . . .	2002 . . 217 386
		1997 . . 199 490
	Ohio . . . . .	2002 . . 358 084
		1997 . . 459 703
	Pennsylvania . . . . .	2002 . . 437 309
		1997 . . 551 787
	South Carolina . . . . .	2002 . . 36 787
		1997 . . N
	Texas . . . . .	2002 . . 284 475
		1997 . . 217 344
3313163	Extruded and drawn aluminum tube	
	United States . . . . .	2002 . . 634 214
		1997 . . 835 635
	California . . . . .	2002 . . 44 632
		1997 . . 63 977
	Indiana . . . . .	2002 . . 82 398
		1997 . . 73 113
	Michigan . . . . .	2002 . . 34 638
		1997 . . 32 150
	Texas . . . . .	2002 . . 35 262
		1997 . . N

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
331316	Aluminum extruded product manufacturing		
00900001	Total materials .....2002..	X	3 063 536
	.....1997..	X	3 492 111
33131205	Unalloyed aluminum and aluminum-base alloy ingot, pig, and shot .....1,000 s tons..2002..	q365.4	441 941
	.....1997..	558.1	820 314
33131207	Alloyed aluminum and aluminum-base alloy ingot, pig, and shot .....1,000 s tons..2002..	q592.0	837 637
	.....1997..	908.8	1 276 928
33131501	Aluminum and aluminum-base alloy sheet, plate, foil, and welded tubing ..... mil lb..2002..	D	D
	.....1997..	.8	4 260
33131600	Aluminum and aluminum-base alloy extruded shapes (including extruded rod, bar, pipe, tube, etc.) ..... mil lb..2002..	q268.5	266 832
	.....1997..	222.9	217 119
33100011	All other aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, ingot, pig shot, sheet, plate, foil, welded tubing, extruded shapes, and fabricated metal) .....2002..	X	409 493
	.....1997..	X	406 558
33141935	Magnesium and magnesium-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	S	5 893
	.....1997..	7.8	22 938
33141905	All other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	6 483
	.....1997..	X	N
00190021	Aluminum and aluminum-base alloy scrap (excluding home scrap) from other establishments of your company .....1,000 s tons..2002..	p56.3	68 803
	.....1997..	111.5	149 921
00190022	Aluminum and aluminum-base alloy scrap (excluding home scrap) from all other sources .....1,000 s tons..2002..	q178.5	206 898
	.....1997..	226.1	232 486
33141105	Copper and copper-base alloy refinery shapes (excluding castings, forgings, and fabricated metal products) .....1,000 s tons..2002..	.5	772
	.....1997..	N	N
33120001	Steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	X	N
00190080	Other nonferrous metal scrap (excluding home scrap) .....1,000 s tons..2002..	S	1 855
	.....1997..	D	D
32220017	Paper and paperboard containers (including shipping sacks and other paper packaging supplies) .....2002..	X	18 517
	.....1997..	X	N
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	625 957
	.....1997..	X	D
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	159 082
	.....1997..	X	—

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p—10 to 19 percent estimated; q—20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.